

## CLIMATOLOGICAL DATA FOR JULY, 1913.

## DISTRICT NO. 10, GREAT BASIN.

ALFRED H. THIESSEN, Section Director.

## GENERAL SUMMARY.

July was unusually cool and wet. The temperatures for the district as a whole averaged as low as any on record for July, excepting in 1897, 1902, and 1912. The precipitation was the heaviest for July on record in the Nevada area, and in the Utah area it was nearly as heavy as in July, 1912, the rainfall in which month was exceeded only in July, 1896.

From an agricultural viewpoint the month was very favorable. The frequent showers were beneficial to dry farms and kept the ranges green, but some damage to hay was reported. There was an unusual number of cloudbursts during the month, which added materially to the irrigation water supply. In Nevada the cloudbursts and excessive rainfall caused train delays by washing out the roadbed both on the Southern Pacific and Western Pacific Railroads. There was also considerable damage to private property.

## TEMPERATURES.

The temperature for the district averaged  $67.6^{\circ}$ , which is  $3.3^{\circ}$  below normal, and the individual means varied from  $53.8^{\circ}$  at Park City, Utah, to  $82.4^{\circ}$  at Jean, Nev. The temperature chart shows that the highest means occurred in the more level counties in the Utah area and in the southern half of the Nevada area. The lowest means were observed in the Wyoming area and in the more elevated portions of the Utah area.

The deficiencies of temperature were very large at a few stations. At Kelton, Utah, the mean was  $65.4^{\circ}$ , being  $11.6^{\circ}$  below normal; at Tecoma, Nev., the mean was  $63.4^{\circ}$ , being  $10.8^{\circ}$  below normal, and at Beowawe, Nev., the mean was  $66.5^{\circ}$ , or  $10.7^{\circ}$  below normal. The excesses in the monthly mean temperature were very few, the greatest being  $2.8^{\circ}$  at Burns, Oreg.

The temperatures during the first half of the month were near the normal, with the exception of the 5th, 6th, and 7th, when the weather was abnormally warm and the highest temperatures of the month were generally observed.

After the 10th the weather grew cooler at many places, becoming generally so on the 12th; and the lowest temperatures for the month were recorded at a majority of stations during the period from the 10th to the 14th.

Although the mean temperatures averaged considerably below normal, nearly all stations reported maximum temperatures of  $90^{\circ}$  or above, and at 11 stations temperatures of  $100^{\circ}$  or over were observed. The highest temperatures that occurred in the various states having areas in this district were as follows:  $88^{\circ}$  at Border, Wyo., on the 6th;  $98^{\circ}$  at Grace, Idaho, on the 6th;  $103^{\circ}$  at Low, Utah, on the 10th;  $95^{\circ}$  at Burns, Oreg., on the 25th;  $88^{\circ}$  at Bridgeport, Cal., on the 5th and other dates; and  $110^{\circ}$  at Jean, Nev., on the 11th.

Temperatures of  $32^{\circ}$  or below occurred in all the areas of the several States in this district except Idaho. As these low temperatures occurred at the more elevated stations, no damage to tender crops resulted. The lowest temperatures were:  $30^{\circ}$  at Cokeville, Wyo., on the 12th;  $34^{\circ}$  at Paris, Idaho, on the 2d, 4th, and 29th;  $21^{\circ}$  at Park City, Utah, on the 7th;  $25^{\circ}$  at Cliff, Oreg., on the 13th;  $32^{\circ}$  at Bridgeport, Cal., on the 16th; and  $26^{\circ}$  at Wells, Nev., on the 14th.

## PRECIPITATION.

The monthly precipitation ranged from as high as 7.06 inches at Park City to a trace at Farmington and Corinne, all in Utah. The average for the district as a whole was 1.40 inches, or 0.89 inch above the normal. The rainfall was well distributed, there being only a few stations having deficient amounts, while many reported several times their normal amounts.

The rainfall in the Nevada area was particularly heavy, and the section director of that State writes:

The average precipitation for the Nevada area was 1.52 inches, which is six times the normal amount. Tonopah reported 0.16 inch, and is the only station having less than the normal. In the northern section amounts ranged from 0.27 inch at Gerlach to 4.51 inches at Golconda. In the middle section amounts ranged from 0.16 inch at Tonopah to 2.36 inches at Potts. In the southern section the amounts ranged from 0.95 inch at Oasis Ranch to 1.48 inches at Lida. The heaviest precipitation in 24 hours was 2 inches at Golconda on the 22d. Seven places in the State reported over 1 inch in 24 hours. Because of the mountainous character of the country rains did a great deal of damage to roads and railroads, causing washouts and landslides, making the roads impassable and delaying train service many hours in some instances. A large amount of alfalfa hay was spoiled, but ranges are in excellent condition.

The largest 24-hour amount of rainfall in the district was 2.22 inches at Park City, Utah, on the 18th.

The greater portion of the rain fell from the 15th to the 28th. There was also scattering showers on various dates from the 3d to the 10th in all areas excepting California.

## MISCELLANEOUS PHENOMENA.

The average number of clear days for the district is 15, partly cloudy days 10, cloudy days 6, and rainy days 6.

The observer at Morgan, Utah, reported a terrific thunderstorm in the vicinity of his station on the 23d, which did considerable damage to crops and property.

The observer at Showell, Utah, reported a severe thunderstorm on the 26th, which damaged grain and gardens.

Mr. Charles Pratt, of North Fork, Nev., reported that rains from 18th to 28th spoiled considerable hay.

Mr. C. M. Carter, of Smith, Nev., reported that the July rains did more damage than good, that hundreds of tons of hay were spoiled, ditches were filled with mud, obstructing the flow of water, and that the second crop of alfalfa was yellow from too much water.

TABLE 1.—*Climatological data for July, 1913. District No. 10, Great Basin.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeasured.						
<i>Wyoming.</i>																				
Border.	Lincoln.	6,085	11	61.5	-0.4	88	6	33	12†	46	2.97	+ 2.36	1.48	0.0	6	15	10	8	w.	S. W. Condron.
Cokeville.	do.	6,204	3	59.0	-	87 <sup>1</sup>	6†	30 <sup>1</sup>	12	49 <sup>1</sup>	1.74	-	0.78	0.0	7	19 <sup>1</sup>	1 <sup>1</sup>	5 <sup>1</sup>	w.	E. J. Tuckett.
Evanston.	Uinta.	6,860	17	59.5	-2.1	85	6†	33	12	42	2.01	+ 1.13	0.91	0.0	6	16	14	1	w.	Frank Tucker.
<i>Idaho.</i>																				
Ganiva.	Bear Lake.	6,171	4	66.4	-	98	6	36	12†	50	1.84	-	0.87	0	5	18	10	3	-	F. W. Boehme.
Grace.	Bannock.	5,400	6	66.4	-	96	6	34	2†	45	0.76	+ 0.03	0.46	0	4	18	12	1	sw.	E. W. Joy.
Paris.	Bear Lake.	5,946	18	59.0	-3.9	96	20†	34	2†	45	1.27	+ 0.62	0.41	0	8	19	6	6	n.	John Norton.
Weston.	Franklin.	4,460	14	66.0	-1.7	92	17	38	31	45	-	-	-	-	-	-	-	-	-	Wm. T. Chatterton.
<i>Utah.</i>																				
Alpine.	Utah.	4,900	14	65.7	-	97	6	50	4†	38	0.45	-0.17	0.45	0	1	16	11	4	-	T. F. Carlisle.
Beaver.	Beaver.	6,000	9	65.7	-	97	6	36	1†	57	1.55	-	0.40	0	10	9	21	1	s.	Henry Baker.
Black Rock.	Millard.	4,872	9	69.1	-	98	5	34	1	60	0.13	-	0.13	0	1	14	17	0	s.	W. D. Livingston.
Brigham City.	Boxelder.	4,305	-	71.9	-	94	6	50	12	38	0.30	-	0.07	0	8	-	-	-	-	Nephi M. Valentine.
Burrville.	Sevier.	6,800	2	61.4 <sup>d</sup>	-	87 <sup>a</sup>	5	35	12†	50 <sup>a</sup>	1.96	-	0.90	0	10	-	-	-	-	F. R. Curtis.
Castle Rock.	Summit.	6,244	8	-	-	-	-	-	-	-	1.61	-	0.65	0	12	14	16	1	w.	David Moore.
Cedar City.	Iron.	5,750	3	71.4	-	97	6	50	4†	38	1.13	-	0.46	0	8	15	9	4	s.	Parley Dailey.
Center.	Tooele.	4,260	3	68.8	-	96	6†	45	1†	44	0.35	-	0.33	0	8	15	12	8	s.	L. C. Peterson.
Clarkston.	Cache.	5,930	2	-	-	-	-	-	-	-	0.25	-	0.25	0	2	15	8	8	-	W. J. Griffiths.
Corinne.	Boxelder.	4,240	71.3	-7.6	95	7†	40	4	45	T.	-0.62	T.	0	0	20	9	2	-	A. C. Murphy.	
Deseret.	Millard.	4,541	18	72.7	+ 0.3	102	6	40	12	56	0.35	+ 0.11	0.35	0	1	15	8	8	s.	S. W. Western.
Elberta.	Utah.	4,650	11	73.0	-1.7	98	6	43	12	47	0.80	+ 0.33	0.50	0	5	14	14	3	s.	D. C. Walkey.
Enterprise.	Washington.	5,750	7	-	-	-	-	-	-	-	1.21	-	0.49	0	7	22	3	6	-	Jas. E. Hall.
Erekson.	Tooele.	4,850	1	-	-	-	-	-	-	-	1.11	-	0.41	0	7	-	-	-	-	N. W. Erekson.
Farmington.	Davis.	4,267	12	71.9	-0.6	93	1†	45	31	44	T.	-0.50	T.	0	0	23	8	0	sw.	Chas. Boylín.
Fillmore.	Millard.	5,100	21	73.4	-2.0	101	5†	48	28	49	1.04	+ 0.34	0.65	0	6	-	-	-	-	J. J. Starley.
Garland.	Boxelder.	4,248	1	70.6 <sup>a</sup>	-	94	8	46	11	39 <sup>a</sup>	3.04	-	2.20	0	7	9	21	1	s.	Heber C. Cutler.
Garrison.	Millard.	4,850	9	70.8 <sup>a</sup>	-	96 <sup>a</sup>	6†	40	1	50 <sup>a</sup>	0.36	-	0.26	0	2	10	4	12	s.	E. M. Smith.
Government Creek.	Tooele.	5,277	12	70.9	-2.3	96	6	46	14	43	0.71	+ 0.16	0.23	0	7	21	5	5	s.	Walter James.
Granger.	Salt Lake.	4,560	1	-	-	-	-	-	-	-	0.50	-	0.50	0	1	-	-	-	-	Geo. E. Greene.
Grantsville.	Tooele.	4,220	6	-	-	-	-	-	-	-	1.63	-	1.10	0	7	12	19	0	sw.	Monto Barrus.
Grouse Creek.	Boxelder.	5,148	3	-	-	-	-	-	-	-	3.11	-	1.55	0	9	14	6	11	s.	Philip Paskett.
Heber.	Wasatch.	5,563	20	63.8	-2.3	90	5†	33	12	51	1.10	+ 0.28	0.30	0	8	16	12	3	s.	John Crook.
Henefer.	Summit.	5,301	13	64.2	-0.8	90	8	35	12	48	2.12	+ 1.32	0.75	0	9	16	9	6	w.	William Brewer.
Hooper.	Weber.	4,436	3	-	-	-	-	-	-	-	1.00	-	0.70	0	2	-	-	-	-	T. M. Jones, jr.
Ibapah.	Tooele.	7,500	6	65.4 <sup>c</sup>	-	95 <sup>a</sup>	6†	36 <sup>a</sup>	12	57 <sup>a</sup>	2.06	-	0.65	0	7	11	11	9	s.	W. M. Chastain.
Iosepa.	Millard.	5,250	2	-	-	-	-	-	-	-	1.00	-	0.50	0	5	9	0	22	-	John J. Watson.
Junction.	Tooele.	4,356	2	72.6	-	100	6	47	4	43	0.87	-	0.50	0	3	4	6	21	n.	Geo. K. Hubbell.
Kanosh.	Pinto.	6,000	1	-	-	-	-	-	-	-	0.90	-	0.66	0	5	11	20	0	s.	Joseph Jensen.
Keeton.	Millard.	5,250	6	-	-	-	-	-	-	-	0.19	-	0.12	0	4	-	-	-	-	Geo. Crane.
Lemay.	Boxelder.	4,230	33	65.4	-11.6	92	5	37	14	47	0.94	+ 0.58	0.42	0	4	0	28	3	s.	F. W. Klock.
Levan.	do.	4,221	2	80.2	-	94	10	66	1	21	0.56	-	0.36	0	5	13	12	6	s.	Agent S. P. Co.
Jub.	Logan.	5,010	23	70.0	-1.6	95	6	45	4	40	0.40	-	0.14	0	6	16	9	6	sw.	Wm. Brown.
Low.	Tooele.	4,602	7	77.1	-	103	10	50	4	40	1.50	-	1.50	0	2	26	2	3	-	Utah Experiment Station.
Lucin.	Boxelder.	4,504	6	68.4 <sup>c</sup>	-	95 <sup>a</sup>	7	41 <sup>a</sup>	4†	43 <sup>a</sup>	2.52	-	1.05	0	10	16	13	2	sw.	Agent W. P. Co.
Manti.	Sanpete.	5,575	13	69.4 <sup>c</sup>	-0.8	90	5	40	25	41	0.40	-	0.15	0	5	9	0	22	-	E. C. Puryear.
Maple Creek.	Utah.	4,890	2	-	-	-	-	-	-	-	1.19	-	0.70	0	6	18	9	4	-	J. M. Anderson.
Marion.	Summit.	6,400	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Lewis W. Gillilan.	
Maryavale.	Plute.	6,180	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jas. Woolstenhulme.	
Meadowville.	Rich.	6,200	12	62.4	-2.0	88	5†	35	31	48	0.80	+ 0.31	0.60	0	3	20	4	7	w.	Lafe King.
Midlake.	Boxelder.	4,235	2	74.1	-	86	7	59	4	15	1.20	-	1.10	0	2	14	10	7	s.	J. S. Modiat.
Midvale.	Salt Lake.	4,365	1	72.3	-	96	8†	43	11	48	1.12	-	0.73	0	5	10	19	2	n.	Mrs. S. M. Gibson.
Milford.	Beaver.	4,982	5	73.0	-	102	7	44	28	50	1.00	-	0.50	0	2	22	1	3	nw.	C. McGhie.
Mills.	Cache.	4,911	1	-	-	-	-	-	-	-	0.82	-	0.44	0	3	-	-	-	-	R. J. Bandreau.
Millville.	Beaver.	4,848	18	-	-	-	-	-	-	-	0.78	+ 0.34	0.30	0	8	5	19	4	s.	Geo. McCune.
Minersville.	Iron.	6,070	11	-	-	-	-	-	-	-	0.70	-0.03	0.28	0	7	10	20	1	sw.	Fred Yeates.
Modena.	Iron.	5,479	12	69.8	+ 0.1	95	10	44	26	50	0.81	-0.45	0.48	0	4	14	13	4	sw.	Fred R. Pryor.
Morgan.	Morgan.	5,068	6	66.6	-	91	6	39	12	45	0.26	-	0.15	0	2	27	0	4	-	U. S. Weather Bureau.
Moroni.	Sanpete.	5,519	5	67.6	-	90	6	45	12	36	0.90	-	0.35	0	8	11	13	7	sw.	E. O. Kingston.
Mosida.	Utah.	4,510	1	72.2	-	98	11†	45	12†	53	1.05	-	0.95	0	2	27	0	4	-	B. F. Ellason.
Nephil (near).	Jub.	5,119	8	70.0 <sup>c</sup>	-	96 <sup>a</sup>	6	43	11	43 <sup>a</sup>	0.15	-	0.06	0	5	5	5	4	sw.	L. B. Curtis.
New Castle.	Iron.	5,150	1	-	-	-	-	-	-	-	0.75	-	0.47	0	3	-	-	-	-	Exp. Station.
Oak City.	Millard.	4,900	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T. W. Jones.	
Orden.	Weber.	4,310	42	67.6	-6.3	92	4	43	12†	47	0.33	+ 0.07	0.19	0	4	11	8	12	w.	Peter Nielsen.
Panguitch.	Garfield.	6,560	1	62.4	-	94	5	37	14	50	1.92	-	0.70	0	10	16	10	10	s.	A. Van de Graaff.
Park City.	Summit.	7,000	8	53.8	-	86	25	21	7	52	7.06	-	2.22	0	10	3	17	11	-	Harry L. Stremble.
Park Valley.	Boxelder.	5,200	2	-	-	-	-	-	-	-	0.77	-	0.35	0	5	21	3	7	se.	Gertrude Evans.
Parowan.	Iron.	5,9																		

TABLE 1.—Climatological data for July, 1913. District No. 10—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeasured.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
<b>Utah—Continued.</b>																				
Thistle.....	Utah.....	5,075	19																	
Tooele.....	Tooele.....	4,900	17	63.8	- 4.6	90	6	49	1†	36	2.33	+ 1.72	0.85	0	12	3	5	23	s.	John Thorgerson.
Utah Lake P. S.....	Utah.....	4,500	5																	E. A. Bonelli.
Vernon.....	Tooele.....	5,500	2																W. A. Knight.	
Wendover.....	do.....	4,237	1	75.8		99	9	45	20	42	0.65		0.72	0	7	11	20	0	sw.	Glynn Bennion.
Whiskey Creek.....	Millard.....	4,850	2																J. S. Cooper.	
Winder.....	Garfield.....	8,000	0																George Stevens.	
Woodruff.....	Rich.....	6,500	10	59.0	- 1.6	87	6†	28	1†	53	1.30	+ 0.69	0.35	0	7	12	10 <sup>b</sup>	1 <sup>b</sup>	Rollo Adair.	
<b>Oregon.</b>																			A. L. Eastman.	
Burns.....	Harney.....	4,157	22	68.6	+ 2.8	95	20	34	12	56	1.99	+ 1.78	1.25	0	5	21	4	6	w.	J. C. Welcome, Jr.
Cliff.....	Lake.....	4,300	6	59.8		91	18	35	13	52	1.17		0.72	0	4	17	13	1	nw.	John C. Green.
Paisley.....	do.....	4,208	10	63.6		88	8	34	13	40	2.34		1.10	0	6	21	5	5	n.	C. M. Sain.
Silver Lake.....	do.....	4,700	16	61.2	- 3.4	94	20	29	17	45	1.84	+ 1.34	1.10	0	4	18	12	1	sw.	G. W. Marvin.
<b>California.</b>																				
Bridgeport.....	Mono.....	6,500	0	59.0	:	88	5†	32	16	50	1.59		0.36	0	11	8	6	17	sw.	A. F. Scott.
Cathedral Park.....	Eldorado.....	6,400	0	58.3		85	5	38	10	35	2.12		1.00	0	12	6	4	21	s.	Carl Fluegge.
Tahoe.....	Placer.....	6,240	2	57.8		85	12	34	4	48	1.36		0.34	0	8	5	5	1	w.	R. M. Watson.
Truckee.....	Nevada.....	5,918	41	60.8	- 4.6	85	11†	38	22	44	2.20	+ 2.04	1.00	0	6	17	1	13	.....	Southern Pacific Co.
<b>Nevada.</b>																				
Austin.....	Lander.....	6,594	24	66.3	- 2.9	90	5†	42	27†	45	1.60	+ 1.21	0.49	0	5	20	1	10	se.	F. O. Boe.
Battle Mountain.....	do.....	4,843	42	70.2	- 5.0	102	8	42	13	53	1.64	+ 1.53	0.60	0	8	18	5	8	.....	Southern Pacific Co.
Beowawe.....	Eureka.....	4,905	42	66.5	- 10.7	98	7	36	5†	59	2.12	+ 1.91	1.00	0	5	18	9	4	Do.	Do.
Carlin.....	Elko.....	5,232	42	69.2	- 2.0	103	8	35	11	63	1.10	+ 0.94	0.50	0	3	19	7	5	w.	J. H. Leishman.
Cherry Creek.....	White Pine.....	6,450	5	66.5		96	6	42	4	45	2.10		0.79	0	10	18	8	7	.....	I. F. Wiseman.
Clover Valley.....	Elko.....	6,000	12																se.	A. Booth.
Columbia.....	Esmeralda.....	5,750	6	70.2		97	6†	51	14	42	1.03		0.35	0	9	21	8	2	.....	Walfrid Schiman.
Dry Farm.....	Elko.....	5,600	1	65.8		87	5†	39	13	42	0.88		0.40	0	7	17	3	11	.....	Western Pacific Co.
Elko.....	do.....	5,432	42	66.9	- 4.0	102	5†	31	14	65	1.10	+ 0.84	0.50	0	3	19	7	5	.....	Clay Simms.
Eureka.....	Eureka.....	6,500	15	65.6	- 6.5	91	5	41	27	45	1.42	+ 0.89	1.03	0	9	10	10	11	.....	U. S. Experiment Station.
Fallon.....	Churchill.....	3,966	19	70.8	- 2.7	98	5	42	14	50	1.52	+ 1.43	0.83	0	8	14	7	10	w.	Mrs. G. A. Steele.
Fernley.....	Lyon.....	4,200	40	71.2	- 6.7	98	5†	39	14	51	0.75		0.75	0	1	19	7	5	.....	Forest Service.
Gardnerville.....	Douglas.....	4,830	22	65.0	- 3.1	90	5†	39	5†	51	1.77	+ 1.66	1.03	0	5	18	4	9	w.	Western Pacific Co.
Gerlach.....	Washoe.....	3,931	0	68.4		98	20	30	18	65	0.37		0.22	0	2	15	0	16	.....	Mrs. J. F. Wambolt.
Geyser.....	Lincoln.....	6,055	9	65.1		101	31	25	11	65	0.20		0.20	0	1	19	12	0	s.	C. C. Henningsen.
Glenbrook.....	Douglas.....	6,420	4																.....	Southern Pacific Co.
Golconda.....	Humboldt.....	4,697	34	70.7	- 5.6	99	5	40	13†	45	4.51	+ 4.45	2.00	0	10	10	9	12	w.	Do.
Halleck.....	Elko.....	5,631	20	65.5	- 4.2	93	6†	39	3†	50	0.87	+ 0.66	0.50	0	3	14	11	6	.....	Salt Lake Route.
Jean.....	Clark.....	2,074	5	82.4		110	11	53	24	41				0	3	13	11	7	.....	U. S. Reclamation Service.
Lahontan.....	Churchill.....	4,200	1	74.9		100	8	51	13	39	0.54		0.19	0	7	17	12	2	w.	Ross Lewers.
Lewers Ranch.....	Washoe.....	5,500	25	66.0	- 1.7	92	10	42	2†	44	1.42	+ 1.24	0.62	0	4	12	16	3	.....	L. F. Detwiler.
Lida.....	Esmeralda.....	6,037	0	66.9		91	12	45	25	38	1.48		0.62	0	6	20	8	3	.....	A. P. Tilford.
Lovelock.....	Humboldt.....	3,977	19	68.9	- 7.6	98	8†	40	1	53	2.16	+ 2.06	1.13	0	6	15	15	1	sw.	F. M. Bullock.
Mc Dermitt.....	do.....	4,700	23	66.0 <sup>a</sup>	- 7.7	90 <sup>a</sup>	8	41 <sup>a</sup>	15	40 <sup>a</sup>	1.75	+ 1.51	0.85	0	7	16	12	3	s.	R. E. Middagh.
McGill.....	White Pine.....	6,338	32	68.2	+ 2.2	97	5	45	27	44	2.30	+ 1.77	0.63	0	13	16	12	3	s.	Fred J. Jones.
Millett.....	Nye.....	6,002	5	67.4		94	5	41	30†	49	0.38		0.12	0	4	14	8	9	.....	Southern Pacific Co.
Mina.....	Mineral.....	4,600	6	71.2		102	12†	41	10†	50	2.67		1.42	0	3	15	0	16	.....	Miss Mamie Potts.
Oasis Ranch.....	Esmeralda.....	5,106	0	71.0		98	5	47	26	45	0.95		0.31	0	7	18	10	3	.....	F. M. Payne.
Potts.....	Nye.....	6,990	20	63.4	- 7.2	93	8	38	26†	49	2.38	+ 1.77	0.60	0	8	6	6	19	.....	E. J. Hyatt.
Quinn River Ranch.....	Humboldt.....	4,350	11	68.0 <sup>a</sup>	- 1.0	96	9	41	4	48	0.30	+ 0.12	0.27	0	2	15	8	8	sw.	U. S. Weather Bureau.
Rebel Creek.....	do.....	1	67.7			93	19†	38	14	41	0.41		0.28	0	3	15	8	8	.....	U. S. Reclamation Service.
Reno.....	Washoe.....	4,532	42	68.6	+ 1.1	93	5	43	15	45	1.75	+ 1.61	1.11	0	10	16	10	5	w.	U. S. Weather Bureau.
Soda Lake.....	Churchill.....	4,534	6																.....	U. S. Weather Bureau.
Tecoma.....	Elko.....	4,812	35	63.4	- 10.8	98	9	27	4	63	0.67	+ 0.49	0.29	0	10	9	14	8	sw.	Southern Pacific Co.
Tonopah.....	Nye.....	6,090	8	70.2		92	12	48	26	32	0.16		0.05	0	5	13	16	2	se.	U. S. Weather Bureau.
Welks.....	Elko.....	5,631	41	64.8	- 6.3	94	6†	26	14	65	0.57	+ 0.19	0.32	0	3	15	14	2	.....	Southern Pacific Co.
Winnemucca.....	Humboldt.....	4,432	34	69.2	- 2.4	96	5	42	14	49	1.55	+ 1.38	0.85	0	10	17	4	10	sw.	U. S. Weather Bureau.

<sup>a, b, \*, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.</sup>

\*\* Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.

† Also on other dates.

T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for July, 1913. District No. 10, Great Basin.*

TABLE 2.—*Daily precipitation for July, 1913. District No. 10, Great Basin—Continued.*

Stations.	Watershed.	Day of month.																													Total.				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
<i>Oregon.</i>																																			
Ana River.....	SE. drainage			.08																		.07	.45	.09	1.23	.42							2.33		
Bear Valley.....	do			.56	.04																	.13	.25		.53								1.81		
Burns.....	do			.15																			.15	1.25	.17	.27							1.99		
Burns Mill.....	do																																		
Christmas Lake.....	do			.20																			.02	.32		.85	.19	.01						1.60	
Cliff.....	do	T.		.19																		.06			.72	.20							1.17		
Diamond.....	do	T.		.18	.06																													2.08	
Embody.....	do			.23																															1.27
Fort Rock.....	do			.18																															0.89
Paisley.....	do			.07																															2.34
Riley.....	do	T.																																	1.17
Seneca.....	do																																		
Silver Lake.....	do			.15																															1.84
Valley Falls.....	do																																		1.48
<i>California.</i>																																			
Bijou.....	Truckee																																		
Boca.....	do																																		
Bridgeport.....	East Walker																																		1.50
Cathedral Park.....	Truckee																																		2.12
Deer Park.....	do																																		
Hobart Mills.....	do																																		4.04
Lundy.....	East Walker																																		2.35
McKitney.....	Truckee																																		
Markleeville.....	East Carson																																		2.03
Shields Ranch.....	East Walker																																		1.13
Silver Creek.....	East Carson																																		3.00
Tahoe.....	Truckee	T.																																	1.36
Tallac.....	do																																		3.10
Truckee.....	West Carson																																		2.20
Woodfords.....																																			2.27
<i>Nevada.</i>																																			
Arthur.....	Humboldt		.20																																1.10
Austin.....	Reese		.05																																1.60
Battle Mountain.....	Humboldt	T.																																	1.64
Beowawe.....	do																																		2.12
Carlin.....	do																																		1.10
Cherry Creek.....	do																																		2.10
Clover Valley.....	do																																		
Columbia.....	Desert																																		1.03
Dry Farm.....	Humboldt		.03																																0.58
Elko.....	do																																		1.10
Eureka.....	T.		.02																																1.42
Fallon.....	Carson		.07																																1.52
Fernley.....	Truckee																																		0.75
Gardnerville.....	Carson																																		1.77
Gerlach.....	Desert																																		0.27
Geyser.....	Humboldt																																		0.20
Glenbrook.....	Truckee																																		
Golconda.....	Humboldt		.05																																4.51
Halleck.....	do		.27																																0.87
Hilton.....	do																																		1.88
Jean.....	Desert																																		
Lahontan.....	Carson																																		0.54
Lewers Ranch.....	Truckee																																		1.42
Lida.....	Desert																																		1.48
Lovelock.....	Humboldt		.02																																2.16
McDermitt.....	do		.28																																1.75
McGill.....	do		.03			*																													2.30
Metropolis.....	do																																		0.61
Mill City.....	do																																		2.29
Millet.....	Reese				</																														

TABLE 3.—Maximum and minimum temperatures at selected stations for July, 1913. District No. 10, Great Basin.

Date.	Burns, Oreg.		Nevada.																									
			Cherry Creek.		Elko.		Eureka.		Fallon.		Jean.		Lovelock.		Millett.		Mina.		Rebel Creek.		Reno.		Tecoma.		Tonopah.		Winne- mucca.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		
1.....	80	35	84	46	87	36	85	48	91	47	105	67	87	40	90	45	96	47	79	43	82	47	85	34	89	60	85	49
2.....	80	46	86	54	87	40	82	44	84	48	103	66	89	42	85	45	97	49	73	44	80	46	85	40	85	55	81	51
3.....	78	50	82	42	52	42	77	49	83	52	102	69	80	48	84	57	95	48	70	51	72	57	85	38	88	59	71	51
4.....	94	50	75	47	87	40	81	43	82	45	106	72	85	49	86	45	96	49	78	46	89	45	83	27	83	52	82	45
5.....	92	48	90	45	102	37	91	47	99	49	108	73	90	47	94	45	99	50	91	54	98	53	85	33	91	64	96	48
6.....	90	50	96	55	102	37	89	62	95	57	106	78	96	47	90	55	100	51	92	57	89	59	88	40	92	72	93	54
7.....	88	54	90	56	98	48	90	56	97	57	105	77	95	56	93	53	94	49	92	56	92	58	95	45	91	67	94	60
8.....	90	48	87	58	100	47	87	57	96	58	108	73	95	72	90	54	99	49	91	56	93	57	95	45	91	65	94	56
9.....	93	46	89	52	94	47	87	55	97	56	107	72	96	55	92	54	99	49	90	56	95	55	98	47	89	65	94	54
10....	92	47	86	52	95	47	86	55	94	49	109	76	93	53	93	51	90	41	87	55	92	52	95	42	89	61	89	56
11....	91	45	78	54	89	40	82	44	88	58	110	75	89	57	84	54	90	41	79	50	80	53	92	43	86	60	84	52
12....	90	34	88	45	94	32	90	45	98	48	109	68	95	42	93	51	102	53	89	49	89	54	97	34	92	64	94	45
13....	80	45	89	59	93	44	88	52	87	54	102	77	85	43	84	54	102	54	82	50	84	59	95	40	89	64	79	51
14....	79	44	88	52	88	31	86	41	89	42	99	76	85	46	93	44	100	59	79	38	78	49	90	34	85	60	82	42
15....	82	42	85	53	89	41	84	44	86	44	100	68	85	47	91	56	99	58	79	46	84	43	85	32	85	53	82	46
16....	90	60	87	49	93	58	88	54	90	47	100	71	87	56	89	45	97	55	82	47	88	49	88	35	87	64	88	47
17....	94	64	86	58	99	38	85	50	94	49	89	68	94	48	86	49	94	54	90	49	91	50	94	44	85	61	92	52
18....	94	52	87	60	92	47	80	56	89	62	90	65	90	54	89	43	92	50	91	56	94	59	92	46	86	60	93	50
19....	94	62	74	57	88	44	83	54	91	60	91	69	87	52	83	45	81	60	93	56	87	58	90	44	77	56	89	58
20....	95	66	76	54	86	52	82	55	90	56	91	67	90	55	75	61	75	49	87	57	87	57	87	44	78	57	90	60
21....	90	60	79	59	96	46	80	54	90	59	90	65	92	53	80	50	78	52	80	54	86	60	90	43	76	57	89	57
22....	88	62	79	57	92	48	83	57	88	60	82	65	86	51	80	50	85	58	87	59	82	60	90	42	74	57	86	62
23....	89	53	66	55	90	50	70	55	78	61	84	56	79	56	80	50	84	57	81	60	70	57	91	50	73	56	74	60
24....	86	55	74	52	76	52	71	56	80	58	91	53	79	52	80	58	81	55	75	57	80	51	85	46	73	54	78	56
25....	85	48	77	45	78	54	75	45	81	52	90	56	79	48	79	57	79	54	75	52	82	35	75	51	78	54	86	
26....	86	46	74	49	80	45	72	43	79	52	81	60	75	46	80	48	78	52	76	52	77	49	82	35	68	48	78	52
27....	84	47	71	49	85	58	73	46	83	53	87	60	78	49	75	40	79	51	81	49	74	52	80	30	74	50	79	49
28....	82	40	62	48	85	48	73	46	84	53	89	60	76	49	83	54	80	50	84	50	74	53	82	41	74	51	82	51
29....	82	39	75	43	80	45	75	46	84	54	90	63	82	53	78	42	86	52	80	52	81	53	79	39	77	52	79	56
30....	85	45	82	50	90	40	82	46	86	56	98	56	87	56	85	41	89	52	76	51	86	52	78	35	80	55	83	54
31....	88	51	85	50	98	48	86	46	94	53	99	62	91	59	99	41	93	51	93	54	92	53	85	34	85	62	92	52
Mns....	87.5	49.6	81.5	51.5	89.2	44.6	82.0	49.2	88.5	53.2	97.5	67.3	87.1	50.7	88.5	49.4	90.8	51.7	83.5	51.9	84.1	53.1	87.8	38.9	81.8	58.5	85.4	52.9
Date.	Wyoming.		Utah.																			Salt Lake City.						
			Idaho. Weston.		Corrine.		Deseret.		Fillmore.		Government Creek.		Meadow-ville.		Modena.		Ogden.		Parowan.		Provo.							
	Border.	Evanston.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.						
1.....	80	39	75	38	82	43	80	60	96	46	97	50	90	50	84	38	89	47	81	51	88	55	90	55	96	56		
2.....	79	50	74	51	76	51	85	48	92	55	98	60	85	52	74	50	90	53	90	52	89	50	93	49	80	63	79	56
3.....	75	49	72	46	70	40	80	45	91	45	92	54	84	52	75	47	86	63	80	53	88	58	97	56	80	65	79	56
4.....	74	45	67	43	72	43	83	40	88	48	92	50	80	46	75	47	86	63	80	53	89	58	97	56	80	65	79	56
5.....	79	38	79	38	83	43	87	42	98	48	101	52	90	50	88	45	94	57	76	47	95	54	94	46	85	59	86	59
6.....	88	44	85	54	96	48	85	45	102	56	101	63	96	58	87	58	95	62	80	52	95	62	96	42	87	66	97	66
7.....	83	53	81	52	90	48	95	57	98	62	97	62	92	63	82	57	94	62	81	55	95	62	90	58	80	69	90	69
8.....	86	53	85	51	89	53	98	62	97	58	98	62	92	63	87	61	90	58	86	57	91	63	90	57	86	70	91	60
9.....	87	47	83	50	89	54	92	60	98	56	101	61	93	59	79	57	93	63	82	57	92	55	90	56	81	67	91	70
10....	75	50	74	50	84	54	90	57	99	55	97	60	88	64	95	57	93	65	82	57	93	55	84	57	86	68	86	68
11....	67	49	71	43	77	46	87	44	89	57	95	52	85	56	76	49	87	50	84	58	87	57	89	68	74	60	86	60
12....	79	33	75	33	82	39	89	49	96	40	98	49	90	47	84	36	95	45	75	43	93	45	87	56	88	54	79	64
13....	82																											